

### **REMARKS/ARGUMENTS**

Claim 1 has been amended as set forth above for clarity. Claims 2-22 are cancelled. Claims 23-42 are new. With respect to the cancelled claims, applicant respectfully reserves the right to pursue the subject matter of any of the cancelled claims in any forthcoming continuation application(s). Reconsideration of the application is respectfully requested.

#### **I. Examiner Interview Dated March 3, 2009**

An interview was held on March 3, 2009. During the interview the current features of the claims were discussed. Applicant believes that an agreement was reached that the current changes overcome the cited references.

#### **II. Rejections Under 35 U.S.C. § 101**

Several of the claims were rejected under 35 U.S.C. § 101. Applicant asserts that the rejections have been overcome or are now moot in light of the changes herein. Reconsideration is respectfully requested.

#### **III. Rejections under 35 U.S.C. § 103(a)**

Claims 1, 3-5, 7-10, 12-19, 21 and 22 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Publication No. 2003/0191865 published to De Armas et al. (hereinafter "De Armas") in view of U.S. Patent No. 7,047,533 issued to Circenis (hereinafter "Circenis"). Claims 2, 6, 11 and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over De Armas in view of Circenis and further in view of U.S. Patent No. 5,835,763 issued to Klein (hereinafter "Klein"). As indicated above, claim 1 has been amended to clarify several features. With regard to independent claim 1, the references fail to teach or suggest *hooking the message queue of the thread with a synchronization API of event driven test automation code to bypass the asynchronous window procedures for any action messages received by the thread in combination with the setting of a timer to monitor the message queue of the thread hooked with the synchronization API of the event driven test automation code, wherein the timer is configured to monitor the message queue of the thread to determine when the message queue*

*is empty. The combination of the synchronization API and the timer allow for test automation where a notification is sent via the hooked synchronization API of the event driven test automation code to automatically cause the processing of another action message on the user interface window being displayed on the display of the computer when a message queue is determined as being empty according to the timer.* Claims 2-22 are cancelled and claims 23-42 are new. Applicant believes that the current state of the claims clearly distinguish the cited references. In order to help further prosecution applicant will discuss the specification of the current application and the cited references below.

The specification of the current application indicates several problems associated with prior user interface testing logic. Typical logic included logic that was executed asynchronously with the user interface based target being tested. This was typically the only option available because the generic methods used to drive the user interface were asynchronous. The result of such testing methods include the author of the test must explicitly provide code to synchronize the automation with the state of the application being tested. Stated another way, the tester had to perform an action, wait for an arbitrary period of time or for some explicit signal that the action was done, and then proceed to the next action. Sometimes the tester was required to put the testing into a loop for a specified period of time to ensure that the state of the computer program reached a specified condition. The extra code that was needed for the testing was arcane to write and a virtually guaranteed maintenance expense, as the user tester would have to invariably tune to work around performance issues, where explicit signals were not available. Another problem with past testing is that the testing typically lagged the readiness of the program by significant time periods which made the performance testing difficult to write. (See specification at page 6, lines 15-30).

The teachings of the current application overcome these problems. The teachings of the current application overcome the problems with user interface being driven by logic that is asynchronous. To accomplish this, the specification teaches that a message queue of a thread is hooked with a synchronization API of event driven test automation code. (See specification at page 1, lines 25-26; page 8, line 27-page 9, line 8). The hooking causes a bypass of the asynchronous window procedures for any action messages received by the thread. (See

specification at page 1, lines 25-26; page 8, line 27-page 9, line 8). A timer is also set to monitor the message queue of the thread hooked with the synchronization API of the event driven test automation code. (See specification at page 9, lines 9-18). The timer is configured to determine when the message queue is empty. (See specification at page 9, lines 9-18). When an action message is received, the timer determines if the message queue is empty. When empty, a notification is sent via the hooked synchronization API of the event driven test automation code to automatically cause the processing of another action message on the user interface window being displayed on the display of the computer. (See specification at page 9, line 24 – page 10, line 10).

The references do not teach or otherwise suggest the features of the independent claims as presented above. De Armas teaches the alteration of the functionality of a program. The functionality of the program is altered by replacing a pointer to a target procedure with a point to a surrogate procedure so that the surrogate procedure receives the intercepted message that would have gone to the target procedure. The intercepted message is then processed by the surrogate procedure to modify an operating feature of the target application. With regard to Circenis, Circenis teaches a generic wait function. Circenis teaches that wait functions were typical in the past as a spinning globe for a website pulling up or as a bar status indicated when a document is being printed. The generic wait utility of Circenis provides common functionality and user interface for a plurality of programs associated with a computer so that the wait utility is common across a set of applications. Applicant can find no teaching or suggestion within either De Armas or Circenis of the combination of features in the claims. Furthermore, applicant can find no teaching in the other cited reference relating to the lack of teaching in De Armas and Circenis. With regard to the independent claims, the references fail to teach or suggest hooking the message queue of the thread with a synchronization API of event driven test automation code to bypass the asynchronous window procedures for any action messages received by the thread in combination with the setting of a timer to monitor the message queue of the thread hooked with the synchronization API of the event driven test automation code, wherein the timer is configured to monitor the message queue of the thread to determine when the message queue is empty. The combination of the synchronization API and the timer allow for test automation

where a notification is sent via the hooked synchronization API of the event driven test automation code to automatically cause the processing of another action message on the user interface window being displayed on the display of the computer when a message queue is determined as being empty according to the timer. Reconsideration of the independent claims is respectfully requested.

With regard to the dependent claims, they include features that are not taught or otherwise suggested by the cited references. Furthermore, those claims ultimately depend from the independent claims set forth above. As such, they should be found allowable for at least those same reasons.

**IV. Request for Reconsideration**

In view of the foregoing amendments and remarks, all pending claims are believed to be allowable and the application is in condition for allowance. Therefore, a Notice of Allowance is respectfully requested. Should the Examiner have any further issues regarding this application, the Examiner is requested to contact the undersigned attorney for the applicant at the telephone number provided below.

Respectfully submitted,

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